

As now amended, this application includes a single independent claim 26 in which the cover is defined as including oppositely facing side walls 46, 48 with notches 52, 54 having downwardly facing opening for receiving the base trunnions 36, 38. The surfaces defining the notches coact with the trunnions to accommodate both unimpeded vertical movement of the cover into and out of its closed position, as well as limited rotational movement about the trunnions between the closed position and an included open position. Vertical unimpeded movement of the cover is possible because the notches are substantially larger than the trunnions, and is essential in order to accommodate robotic removal and replacement of the cover.

not in claim

Aiken (U.S. Patent No. 6,138,863) is deficient in this regard because the staggered fingers 32 resiliently engage opposite surfaces of the cylindrical member 36, making it impossible to vertically remove the cover in its closed position, and impeding removal of the cover in its open position (see for example Col. 5, lines 10-13.).

1st disengagement is dislodge as pins disengage by an angle between 10°-90° 90° pins vertical

Corsi et al. (U.S. Patent No. 4,942,271) discloses a hinged plastic duct and thus its relevance to the present invention is, at best, questionable. In any event, here too the joints are characterized by snap fits, which impede free separation of the interengaged components. (see for example Col. 4, lines 1-13 regarding the embodiment shown in Figures 1-5; Col. 5, lines 16-24 regarding the embodiment shown in Figures 6-9; and Col. 6. lines 8-16 regarding the embodiment of Figures 10-13).

Not genuine can be removed

Connections of the type disclosed in Aiken and Corsi et al. would thus require the interengaged components to be forcibly separated from one another, and as such would not be suitable for robotic removal and replacement of covers from their closed positions.

Attached hereto is a marked-up version of the changes made to the specification and claims by this amendment. These attached pages are captioned Version with marking showing changes made.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Maurice E. Gauthier", is written over a horizontal line.

Maurice E. Gauthier  
Registration No. 20,798  
Samuels, Gauthier & Stevens  
225 Franklin Street, Suite 3300  
Boston, Massachusetts 02110  
Telephone: (617) 426-9180, Ext. 113

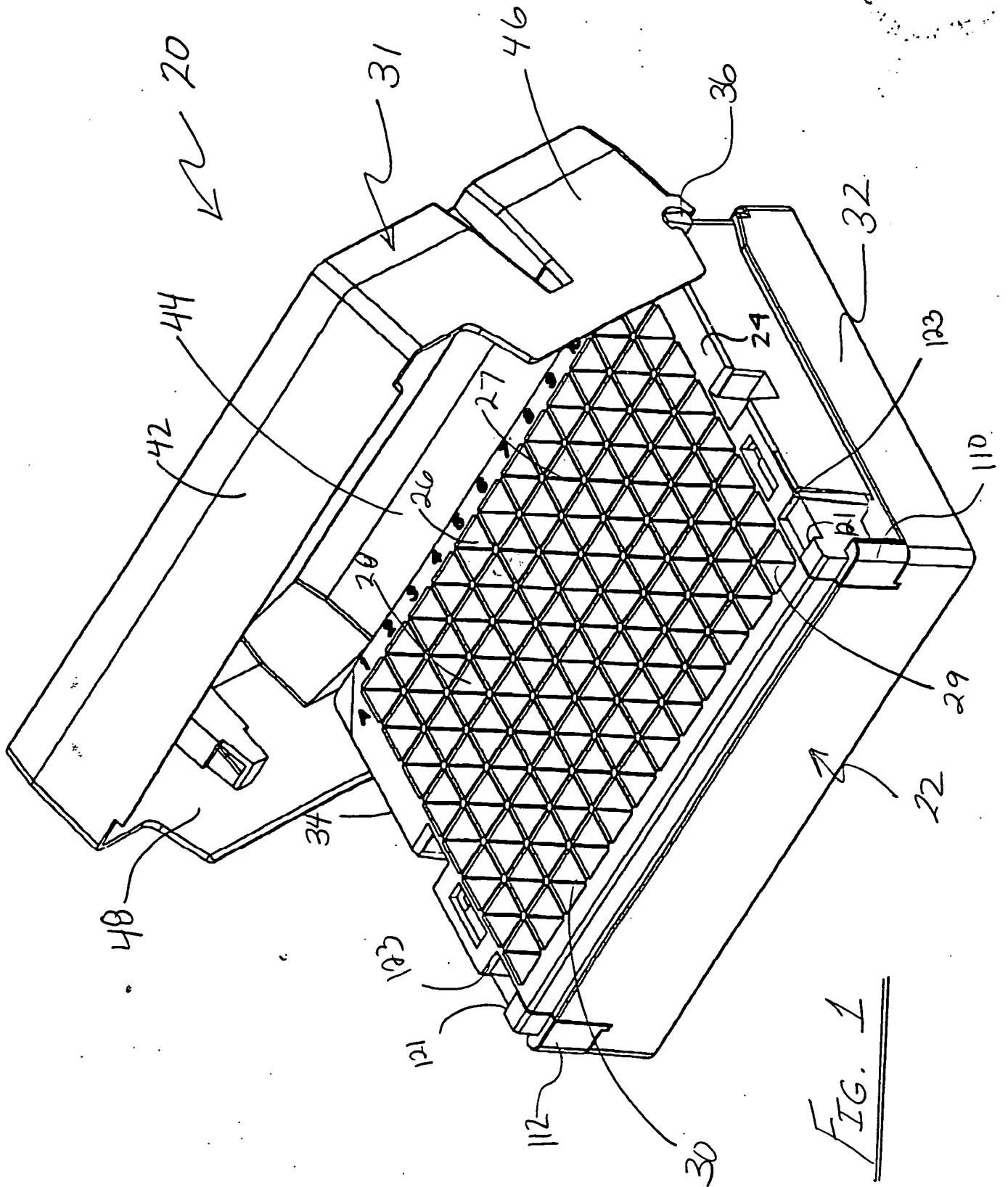


FIG. 1

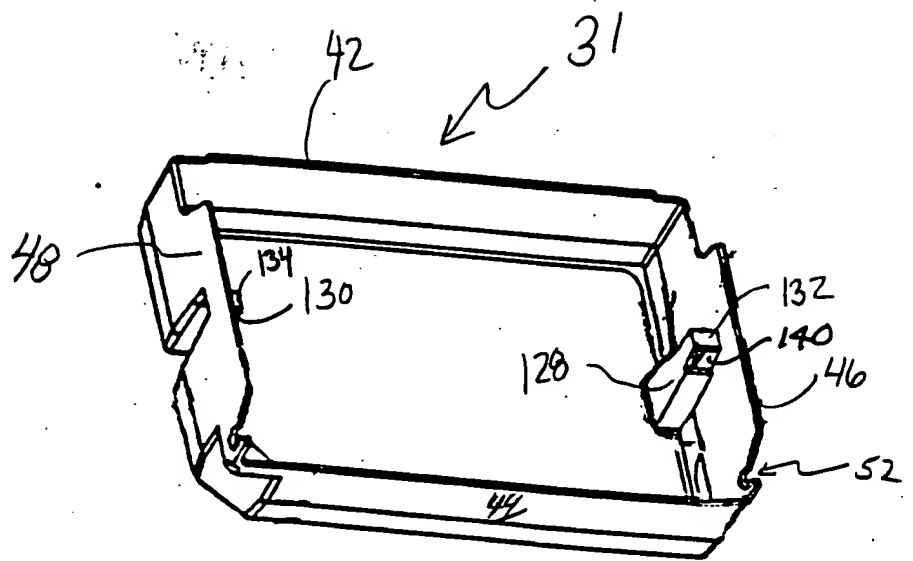


FIG. 12



VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

Replace the paragraph beginning at page 8, line 6 with the following rewritten paragraph:

-- FIG. 9 is a sectional view taken along line A-A in FIG. [8] 7 to illustrate the depth of pads within the opening. In an alternative embodiment, it is contemplated that the pads may be located in the corners, so the air flow paths are located along the sidewalls rather than in the corners. --

IN THE CLAIMS:

The following new claims 26-28 have been added:

- 1           26.   A tube rack comprising:
- 2                   a base having a top surface and oppositely facing side walls, said top surface
- 3   being subdivided into an array of tube-receiving openings, each of said side walls having a
- 4   trunnion protruding outwardly therefrom, with said trunnions being aligned coaxially; and
- 5                   a cover having oppositely facing side walls, notches in said side walls having
- 6   downwardly facing openings, said cover being configured and dimensioned to be seated on
- 7   said base in a closed position enclosing said top surface, with said trunnions received in said
- 8   notches via <sup>downward facing</sup> said openings, said notches being defined by surfaces that coact with said trunnions
- 9   to accommodate (i) unimpeded vertical movement of said cover into and out of said closed

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

10 position, and (ii) limited rotation of said cover about said trunnions between said closed  
11 position and an inclined open position providing access to said tube-receiving openings.

1 27. The tube rack of claim 26 wherein said downwardly facing openings are larger  
2 than the maximum transverse dimensions of said trunnions.

1 28. The tube rack of claim 26 wherein said tube receiving openings communicate  
2 with vertically disposed wells having open bottoms, and wherein said wells are provided  
3 internally with mutually spaced support pads positioned to vertically support tubes received in  
4 said wells via said openings.

Claims 49, 50 and 59 have been amended as follows:

1 2. (Amended) The tube rack of claim [1] 26, wherein [each of] said openings  
2 [comprises a plurality of support pads positioned within said opening to vertically support the  
3 tube within its associated said opening, wherein said pads comprise a surface that supportably  
4 engages the tube] include internal mutually spaced pads, said pads being positioned to support  
5 tubes received in said openings, while providing flow paths adjacent to the [tube] tubes through  
6 which air may pass.

1 3. (Amended) The tube rack of claim [2] 26, wherein said [surface comprises a]  
2 pads have chamfered concave [surface] surfaces.

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

10. (Amended) The tube rack of claim [1] 26, further comprising:  
first and second slide latches each having a lengthwise tongue; and  
wherein [said base comprises first and second base sidewalls that] the sidewalls of said  
base each include a slide surface comprising a lengthwise groove that slidably mates with one  
of said lengthwise tongues of an associated one of said slide latches, such that each of said  
slide latches moves lengthwise over its associated said slide surface between latched and  
unlatched positions.